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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MIZRAHI, DIANE D

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,112

Applicant(s)

GUDBJARTSSON ET AL.

Examiner

DIANE D. MIZRAHI

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10-25-04; 10-26-05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS: 6-24-03</u> . |

III. DETAILED ACTION

Claims 1-56 are presented for examination and are pending.

Drawings

The Examiner contends that the drawings submitted on June 24, 2003 are acceptable for examination proceedings.

Claim Rejections - 35 USC 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

Claims 1-56 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, the claims are not directed towards the final result that is “useful, tangible and concrete

(See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

According to the New Guidelines of October 26, 2005, which states that “A claim limited to a machine or manufacture, which has a practical application, is statutory. In most cases a claim to a specific machine or manufacture will have a practical application. See Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557)... a specific machine to produce a useful, concrete, and tangible result and State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

(Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility <http://rs6.net/tn.jsp?t=mdmd7pbab.0.kbg76pbab.p9qiiibab.7440&p=http%3A%2F%2Fwww.uspto.gov%2Fweb%2Foffices%2Fpac%2Fdapp%2Fopla%2Fpreognotice%2Fguidelines101_20051026.pdf>)

Therefore, Examiner believes that the above listed claims are nonstatutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15, and 31-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Nicholas Pouschine et al. (U.S. Patent No. 5,918,232 and Pouschine hereinafter).

Regarding Claim 1 and 31, Pouschine teaches defining sets of data to be retrieved from a data store, comprising the steps of: providing a written representation of a desired data set in terms of dimensions and relation instances, the desired data set having a certain set type; (col 4, lines 47-50) implying constraints on relation instances or dimensions based on the set type of the desired data set and dimension expressions, said step of implying constraints enabling length of the written representation to be minimized (col 7, lines 64-67; see also col 13, lines 1-34) ; and using the written representation to query the data store to retrieve the desired data set (col 7, lines 7-12 and 37-40) .

Regarding Claim 2, Pouschine teaches providing a written representation includes employing any combination of a disjunctive expression and a conjunctive expression; (col

13,lines 1-50; col 30, line 46) and further comprising the step of: using a record operator to apply multiple atomic constraints on a same tuple in a relation (col 13, lines 1-50).

Regarding Claims 3 and 32, Pouschine teaches determining which relations to use in the evaluation of each conjunct in the written representation by using (i) the set type of the desired data set, (ii) a dimension list based on records in the conjunct of the written representation of the data set, and (iii) dimension relation associations and related inclusion criteria. (col 7, lines 64-67 : see also col 13, lines 1-34).

Regarding Claim 4 , Pouschine teaches performing OR-distribution on disjunctive expressions; and eliminating from disjunctive expressions, conjuncts with undefined binding variables (col 13, lines 1-50; col 30, line 46).

Regarding Claims 5 and 33, Pouschine translating conjunctive expressions to respective SQL joint terms; and translating disjunctive expressions to respective SQL-union terms (col 15,lines 61-66).

Regarding Claim 6, Pouschine moving terms with negation and no binding variables furthest back in the conjunct; placing terms without negation ahead of other terms in the conjunct, and adding a terms with the certain set type of the desired data set to the front of the conjunct if all existing terms have negation (col 14,lines 64-67 to col 15,lines 1-8).

Regarding Claims 7 and 34, Pouschine rewriting the disjunctive and/or conjunctive expressions such that an SQL union operator is applied after the SQL join terms are calculated, resulting in a computationally faster implementation (col 15, lines 61-66) (col 15, lines 29-67 to col 16,lines 1-5).

Regarding Claims 8 and 36, Pouschine teaches automatically enforcing a record-operator

where an expression in the written representation without the record-operator is semantically equivalent to the expression with the record-operator (col 13, lines 1-50).

Regarding Claim 9, Pouschine teaches of automatically enforcing a record-operator based on attribute structure information or a greedy record enforcement based on attribute coexistence in relations (col 13, lines 1-50).

Regarding Claims 10 and 37, Pouschine teaches providing a written representation includes employing an IN-statement and a disjunctive expression in a nested set; and further comprising the step of applying OR-distribution within the nested set by treating the IN-statement effectively as a record-operator expression (col 13, lines 1-50).

Regarding Claims 11, 35 and 38, Pouschine teaches wherein the data store has a native query engine; and further comprising the step of rewriting the written representation such that upon translation of the rewritten written representation into code for the native query engine, the code is optimized for querying the data store (col 15, lines 61-66).

Regarding Claims 12 and 39, Pouschine teaches providing a written representation includes utilizing a certain symbol to specify hierarchical constraints on dimensions (col 7, lines 1-12).

Regarding Claims 13 and 40, Pouschine teaches wherein the certain symbol is a colon or an equal sign followed by a colon (col 7, lines 1-12).

Regarding Claim 14, Pouschine teaches utilizing certain symbols to specify constraints on dimensions that are mapped according to domain type of said dimension (col 11, lines 35-50; col 7, lines 1-12).

Regarding Claims 15 and 41, Pouschine providing an expression with aggregate function;

and further comprising the step of: translating the expression into a SQL statement in which a GROUP BY clause is implicitly defined by the certain set type (col 15, lines 58-67 to col 16, lines 1-5).

Double Patenting

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-56 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25, respectively of copending Application No.10/356,365. Although the conflicting claims are not identical, they

are not patentably distinct from each other because they are substantially similar in scope and they use the same wording .

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Other Prior Art Made of Record

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions. Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D. Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Diane Mizrahi
Primary Patent Examiner
Technology Center 2100

January 4, 2005